PATENT

Case Docket No. NIH202.001C1
Date: April 15, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	:	Pang et al.
Appl. No.	:	10/656,721
Filed	:	September 5, 2003
For	:	SUBGENOMIC REPLICONS OF THE FLAVIVIRUS DENGUE
Examiner	:	Unknown
Group Art Unit	:	Unknown

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

April 15, 2004
(Date)

Nancy W. Vensko, Reg. No. 36,298

TRANSMITTAL LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application are:

(X) An Information Disclosure Statement.

(X) A PTO Form 1449 with twenty-eight (28) references.

(X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.

(X) Return prepaid postcard.

Nancy W. Vensko
Registration No. 36,298
Attorney of Record
Customer No. 20,995
(805) 547-5580

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INFORMATION DISCLOSURE STATEMENT

Applicant	:	Pang et al.
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is form PTO-1449 listing 28 references that are also enclosed.

This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 4/15/04

By: _____

Nancy W. Vensko
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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. NIH202.001C1	APPLICATION NO. 10/656,721
	APPLICANT Pang et al.	
	FILING DATE September 5, 2003	GROUP Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	1	WO 99/28487	06/10/1999	PCT				

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	2	Beard, C. et al. 1999 "Development of DNA vaccines for foot-and-mouth disease, evaluation of vaccines encoding replicating and non-replicating nucleic acids in swine" *J Biotechnol* 73:243-249.
	3	Bhamarapravati, N. et al. 2000 "Live attenuated tetravalent dengue vaccine" *Vaccine* 18 Suppl. 2:44-47.
	4	Brinton, M.A. et al. 1998 "Immune mediated and inherited defences against flaviviruses" *Clin Diagn Virol* 10:129-139.
	5	Cardosa M.J. 1998 "Dengue vaccine design: issues and challenges" *Br Med Bull* 54:395-405.
	6	Chambers T.J. et al. 1997 "Vaccine development against dengue and Japanese encephalitis: report of a World Health Organization meeting" *Vaccine* 15:1494-1502.
	7	Chambers, T.J. et al. 1990 "Flavivirus Genome Organization, Expression and Replication" *Ann Rev Microbiol* 44:649-688.
	8	Falgout, B. et al. 1990 "Immunization of mice with recombinant vaccinia virus expressing authentic dengue virus nonstructural protein NS1 protects against lethal Dengue virus encephalitis" *J Virol* 64:4356-4363.
	9	Halstead, S.B. 1988 "Pathogenesis of Dengue: Challenges to molecular biology" *Science* 239:476-481.
	10	Heinz, F.X. 1986 "Epitope mapping of flavivirus glycoproteins" *Adv Virus Res* 31:103-168.
	11	Henchal, E.A. et al. 1988 "Synergistic interactions of anti-NS1 monoclonal antibodies protect passively immunized mice from lethal challenge with Dengue 2 virus" *J Gen Virol* 69:2101-2107.

EXAMINER	DATE CONSIDERED

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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EXAMINER INITIAL*		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	12	Irie K. et al. 1993 "Dengue virus type 2 complete genome" NCBI Database accession No. M29095.
	13	Kanesa-thasan, N. et al. 2001 "Safety and immunogenicity of attenuated dengue virus vaccines (Aventis Pasteur) in human volunteers" *Vaccine* 19:3179-3188.
	14	Khromykh, A.A. et al. 1997 "Subgenomic replicons of the flavivirus Kunjin: construction and applications" *J Virol* 71:1497-1505.
	15	Khromykh, A.A. et al. 1998 "Encapsidation of the flavivirus Kunjin replicon RNA by using a complementation system providing Kunjin virus structural proteins in *trans*" *J Virol* 72:5967-5977.
	16	Khromykh, A.A. 2000 "Replicon-based vectors of positive strand RNA viruses" *Curr Opin Mol Ther* 2:555-569.
	17	Khromykh, A.A. et al. 2001 "Coupling between replication and packaging of flavivirus RNA: evidence derived from the use of DNA-based full-length cDNA clones of Kunjin virus" *J Virol* 75:4633-4640.
	18	Lindenbach, B.D. et al. 1997 "trans-complementation of yellow fever virus NS1 reveals a role in early RNA replication" *J Virol* 71:9608-9617.
	19	Monath, T.P. 1994 "Dengue: the risk to developed and developing countries" *PNAS USA* 91:2395-2400.
	20	Morens, D.M. 1994 "Antibody-dependent enhancement of infection and the pathogenesis of viral disease" *Clin Infect Dis* 19:500-511.
	21	Pang, X. et al. 1998 "A full-length infectious cDNA clone of a Dengue serotype 2 vaccine virus" in: "World Meeting on Positive Strand Virus".
	22	Pang, X. et al. 2001 "Development of Dengue virus type 2 replicons capable of prolonged expression in host cells" *BMC Microbiol* 1:18. Epub 2001 Aug 24.
	23	Pang, X. et al. 2001 "Development of dengue virus replicons expressing HIV-1 gp120 and other heterologous genes: a potential future tool for dual vaccination against dengue virus and HIV" *BMC Microbiol* 1:28. Epub 2001 Nov 13.
	24	Polo, S. et al. 1997 "Infectious RNA Transcripts from full-length dengue virus type 2 cDNA clones made in Yeast" *J Virol* 71:5366-5374.
	25	Puri, B. et al. 2000 "Construction of a full length infectious clone for dengue-1 virus western pacific, 74 strain" *Virus Genes* 20:57-63.
	26	Rice, C.M. 1996 "Flaviviridae: the viruses and their replication" In: Fields Virology 3rd ed. Philadelphia, Pa. Lippincott-Raven Publishers, pp. 931-959.
	27	Schlesinger, J.J. et al. 1987 "Protection of mice against dengue 2 virus encephalitis by immunization with the dengue 2 virus non-structural glycoprotein NS1" *J Gen Virol* 68:853-857.

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	28	Spencer, F. et al. 1993 "Targeted recombination-based cloning and manipulation of large DNA segments in yeast" *Methods: A Companion Methods Enzymol* 5:161-175.

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